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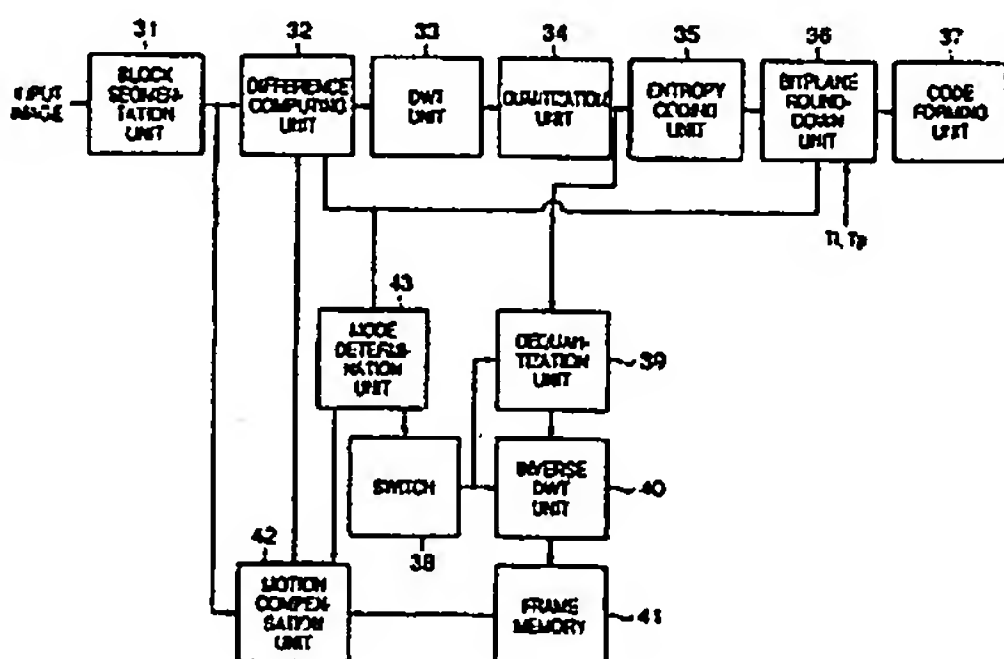
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(54) Title: MOVING IMAGE CODING APPARATUS, MOVING IMAGE DECODING APPARATUS, CONTROL METHOD
THEREFOR, COMPUTER PROGRAM, AND COMPUTER-READABLE STORAGE MEDIUM ✓



(57) Abstract: In this invention, even if final code data is to be generated by selectively discarding code data for each bitplane, errors due to bitplane rounding down operation can be suppressed from being gradually accumulated in predicted data such as P- and B-pictures, thereby preventing a deterioration in image quality. For this purpose, a block segmentation unit (31) segments an input frame into a plurality of blocks, and supplies the respective blocks to a difference computing unit (32). The difference computing unit (32) outputs the blocks to a DWT unit (33) without any change when the intra-frame coding mode is set. When the inter-frame coding mode is set, the difference computing unit (32) outputs the result obtained by computing a difference from predicted data from a motion compensation unit (42) to the DWT unit (33). The frequency component data obtained by the DWT unit (33) and a quantization unit (34) is entropy-coded by an entropy coding unit (35), and a bitplane formed by bit information at the bit position of each component value is coded. A bitplane round-down unit (36) rounds down the code data of bitplanes from the least significant position to an upper bit position such that the resultant code amount becomes equal to or less than a target code amount. A code forming unit then generates code data. Only when the intra-frame coding mode is set, a dequantization unit (39) and inverse DWT unit (40) are executed to update a frame memory (41).

WO 2005/088976 A1



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